

IN THE CLAIMS

Claim 1 (currently amended): ~~A device for instantly pre-heating dies uses an~~ An instantly pre-heating device comprising first and second dies, a movable inductive heating coil to induct high cycle wave magnetism for generating high frequency magnetic fields, said inductive heating coil is being moved and jogged independently between a said first and a said second dies, and is disposed near die surfaces of said first and said second dies, jog said inductive heating coil properly in order to let the high cycle wave magnetism takes effect on a die contact part, so that said die contact part can be parts are pre-heated instantly.

Claim 2 (currently amended): ~~A device for instantly pre-heating dies mainly comprises said first and second dies, said a die contact part is disposed on said die surfaces of said first and second dies respectively, an inlet hole is disposed formed inside said die contact part, said first and second dies have to be pre-heated when processes injection forming, so that melted plastic can flow smoothly inside said die contact part to complete forming process;~~

~~Said an inductive heating coil is an independent element being separated from said first and second dies, which is a coil body in and having a spiral shape to induct high cycle wave frequency electromagnetic field,~~

its one end ~~is~~ being fixed on a mechanical arm for moving in a pre-set route, when said first and second dies are separated, said inductive heating coil ~~is~~ being moved and disposed between said die surfaces, ~~so that high cycle wave magnetism can take effect~~ for generating high frequency magnetic field to act on said die contact part and ~~let~~ to have said die contact part be pre-heated instantly, ~~accordingly, pre-heating efficiency is enhanced, electricity is saved, and at the same time can ensure the melted plastic flow smoothly inside said die contact part.~~

Claim 3 (currently amended): A device for pre-heating dies as claimed in Claim 1, said inductive heating coil ~~could also be~~ is either a flat piece or a spiral body, which is corresponding to the shape of said die contact part ~~or to various concave or convex shape die contact part holes.~~

Claim 4 (currently amended): A device for pre-heating dies as claimed in Claim 3, said inductive heating coil ~~could be~~ is either in series or parallel arrangement in corresponding to ~~said~~ a die contact part hole of said die contact part, when said inductive heating coil is moved between said die surfaces of said first and second dies, ~~it is then~~ said inductive heating coil is placed near said die contact part hole at a ~~proper~~ position, ~~can~~ to move and jog said inductive heating coil in four directions ~~to achieve more evenly distributed pre-heating effect.~~

Claim 5 (currently amended): A device for pre-heating dies as claimed in Claim 1, said inductive heating coil ~~having~~ includes a plurality of ceramic rings disposed on it, in order to prevent said inductive heating coil from improper ~~contact~~ contacting with said first and second dies ~~to conduct electricity~~.

Claim 6 (currently amended): ~~A device for pre-heating dies comprises said first and second dies and A~~ pre-heating device comprising first and second dies, a sub-die disposed on said second die, ~~said a die contact part and said inlet hole are disposed~~ an inlet hole formed on said die surfaces of said first, and said second and said sub-dies, during injection forming, said die contact parts have to be pre-heated to let the melted plastic flow smoothly inside said die contact parts for forming,

two inductive heating coils are independent elements being separated from said first, said second and said sub-dies, said inductive heating coils are coil bodies in and including a spiral shape and can induct high cycle wave for generating high frequency electromagnetic field, and each of them is being fixed on said a mechanical arm respectively, which will then being is moved in a pre-set route, one of said inductive heating coils is being moved between said first die and said sub-die after said first die and said sub-die are separated, another said inductive heating coil is being moved between said second die and said sub-die, so that high cycle wave can take effect for generating high frequency

electromagnetic field to act on said die contact parts ~~and make them be pre-heated instantly, accordingly, pre-heating efficiency is enhanced, electricity is saved, and can also ensure the melted plastic flow smoothly inside said die contact dies.~~

Claim 7 (currently amended): A device for pre-heating dies as claimed in Claim 6, said sub-die ~~having~~ includes a ~~magnetism insulation~~ magnetic shield layer disposed inside in order to prevent two said inductive heating coils ~~to repel or attract from being attracted toward each other, or to affect the movement of said mechanical arms.~~

Claim 8 (currently amended): A device for pre-heating dies as claimed in Claim 6, said inductive heating coils ~~could be~~ are either in flat shape or spiral shape, which is corresponding to the shape of said die contact parts ~~or to various concave or convex shape die contact part hole.~~

Claim 9 (currently amended): A device for pre-heating dies as claimed in Claim 8, said inductive heating coils ~~could be~~ are either in series or parallel arrangement in corresponding to ~~said~~ a die contact part hole of said die contact part, when said inductive heating ~~coil is~~ coils are moved between said die surfaces of said first and said second dies, ~~it is then~~ said inductive heating coils are placed near said die contact part hole at a ~~proper~~ position, ~~can~~ to move and jog said inductive heating coil in four

~~directions to achieve more evenly distributed pre-heating effect.~~

Claim 10 (currently amended): A device for pre-heating dies as claimed in Claim 1, said inductive heating ~~coil~~ ~~having~~ coils include a plurality of ceramic rings disposed ~~on it~~ thereon, in order to prevent said inductive heating coil from improper ~~contact~~ contacting with said first and second dies ~~to conduct electricity.~~